PS COMMITTEE #1
December 8, 2011
Update

MEMORANDUM

December 6, 2011

TO: Public Safety Committee

FROM: Essie McGuire, Senior Legislative Analyst

SUBJECT: **Update – MCFRS Apparatus Management Plan**

Today the Public Safety Committee will receive an update on the Montgomery County Fire and Rescue Service (MCFRS) Apparatus Management Plan. The following individuals are expected to attend and update the Committee:

- Fire Chief Richard Bowers
- Division Chief Steve Lohr, Operations, MCFRS
- Assistant Chief Richard Holzman, MCFRS
- Steve Lamphier, MCFRS
- Dominic Del Pozzo, MCFRS

The Public Safety Committee has received periodic updates on the MCFRS Apparatus Management Plan since it was initially developed in 2004. Since the last update on this issue was in September 2009, the Committee expressed interest in receiving updated information on the elements of the plan and the status of the fleet. MCFRS prepared the attached presentation to update the Committee.

I. Fleet Data

The attached presentation provides current data on the fleet. The MCFRS fleet consists of over 460 vehicles, of which approximately half are light-duty and half are heavy apparatus. Most of the apparatus consists of EMS units (78) and pumpers (69), the two primary response units (circle 4).

Circle 6 details the operational demand for apparatus coverage and the required daily hours by apparatus type. The daily count shows that MCFRS met its required hours of coverage in FY10 and FY11 for engines and EMS units. MCFRS did not always meet its daily count for aerials and rescue squads in these fiscal years, although it was not short by a large amount.

Circle 7 details the relative age and use of the fleet again by type of apparatus. The County purchased large numbers of engines and EMS units at once in recent years, resulting in a relatively low age and mileage for these high use vehicles. At the same time, these units will all

exit warranty status and reach high use at the same time as well, creating a problem for replacements and repair.

The timing issue is apparent in the warranty schedule detailed on circle 7. Many units are currently not under warranty and many more will be leaving their warranty in the next 2-3 years. While the units may have significant life span left in them, the costs of maintenance and repair increase without warranty coverage, and the relative return on investment decreases as increased costs go into vehicles with decreasing years of use ahead.

II. Apparatus Management Plan

The Apparatus Management Plan was developed in 2004 following a report from the Office of Legislative Oversight (OLO) on MCFRS vehicle maintenance and repair. The plan included extensive recommended steps to improve fleet maintenance through system processes, safety and performance standards, information and reporting systems, training, facilities, and maintenance and replacement schedules.

Most of the recommended strategies of the apparatus plan have been addressed and implemented, particularly in the areas of reporting and information systems, performance policies and procedures, facilities, and training. The primary area which has not been fully implemented, largely due to lack of funding, is vehicle acquisition and replacement.

Funding history

- From FY05-FY07, much of the funding for the apparatus plan was approved through supplemental appropriations to the operating budget. The elements of the plan funded included increased maintenance staff and contractual services, some funds for training and information systems, and significant funding for tools and equipment for apparatus. These appropriations did not include funds for vehicle purchase or replacement.

- In May 2006 the Council approved $30.8 million for a large apparatus purchase of approximately 71 vehicles. This purchase was funded through Certificates of Participation (COPs), a form of short-term debt financing.

- In FY10, the Council approved funding in the operating budget for master lease purchase of 14 EMS units. The original request had been for 30 units.

- Apparatus purchases related to the opening of new stations have typically been included in the capital budget projects for that station.

Replacement schedule

As part of the Apparatus Management Plan, MCFRS developed a proposed replacement funding schedule for apparatus that was intended to provide for systematic rotation and replacement of all elements of the fleet, catch-up on replacing older vehicles (particularly in EMS units), and level out future replacement costs in increments over time to avoid large purchase needs.

In the updates provided since its development, the overall structure of the replacement schedule has remained essentially the same. MCFRS adjusted the schedule to reflect both purchases and the absence of vehicle replacements in recent years. The estimated costs, however, have increased during this time in part because of a backlog of identified catch-up purchases (again largely for EMS units) and in part due to increasing vehicle costs. The last apparatus update in September 2009 identified an annual cost of approximately $20 million for the proposed replacement schedule.

Apparatus funding

MCFRS apparatus funding has been approved in both the capital and operating budgets, with both general and fire tax funds, and with COPs. In tracking the funding history in the last 5 years, Council staff notes that the EMS transport fee was identified as a source of funds at various points in the Council discussions and that some purchase requests were adjusted in the Council's final action given the absence of that revenue source.

There is no pending funding proposal at this juncture, and given the County's current funding constraints there is no clear indication of how any replacement schedule would be funded at this time. Given that a consistent apparatus replacement schedule has not been implemented to date, however, it will be important to understand how the current fleet will be maintained over the coming years, the relative cost benefits and losses of maintaining the fleet, and how a reasonable replacement schedule can be initiated for the highest need units.

Council staff suggests that given the time that has elapsed since the initial development of the replacement schedule and the current fiscal situation, it would be helpful for MCFRS to revisit the replacement schedule, identify and evaluate the most critical priorities, and develop possible options for an incremental approach to addressing these priorities. The Committee may want to return to this discussion with a revised context for assessing the apparatus needs and evaluating funding priorities.

f:\mcguire\2011\mcfrs\apparatus comm update pckt 1211.doc

Montgomery County, MD
Fleet Management Program

Update to Public Safety Committee
December 8, 2011

Assistant Chief Rich Holzman

MCFRS Fleet Section

- Who we are?
- Apparatus Management Plan
- Where we are today?
- Where we need to go?

MCFRS Fleet Section

© 2011 MCFRS

Fleet Staff

- Assistant Chief
- 1-Manager III - One position lapsed and unfilled
- 1-Equipment Services Coordinator
- 1 Program Specialist II (In hiring process)
- 1-Administrative Specialist
- 5-Crew Chiefs
- 9-Mechanic Technicians (2 Positions in hiring process)
- 1-Senior Supply Technician (Parts)
- 1-Uniformed Fire Fighter

Apparatus Management Plan

- The Apparatus Plan was accepted by the County Council in April 2004 and was funded incrementally between FY04 and FY10
- The plan included key areas to be addressed:
  - Personnel
  - Vehicle acquisition
  - Facilities
  - Budget
  - Information Technology
  - Training
  - Apparatus Maintenance and Repair
  - Tools, Equipment and Appliances
  - Consulting

Apparatus Management Plan

- The MCFRS Fleet Section under the leadership of then Assistant Chief Steve Lohr and now under the leadership of Assistant Chief Rich Holzman has prioritized and implemented most of the tasks identified based upon available resources.

- The Apparatus Management Plan has and continues to serve as a guiding document but we need to move forward in terms of tasks and priorities.

Montgomery County Fire & Rescue Fleet

- (69) Pumpers
- (23) Aerials
- (10) Rescue Squads
- (7) Tankers
- (78) EMS units
- (15) Brush Trucks
- (42) Special Units, i.e. US&R, Command Post, FEI, etc.
- (6) Battalion Platform
- (228) Light-Duty vehicles

Over 460 Vehicles

© 2011 MCFRS

Organizational Expectations

© 2011 MCFRS

MCFRS Field Operation's Demand

- Provide Units To Cover
  - 34 Engine Companies
  - 17 Aerial Services
  - Total of 25 4 Person ALS Companies
  - 7 Rescue Squads
  - 38 EMS Units
- This Coverage Is For 24 Hours Per Day And 365 Days Per Year

© 2011 MCFRS

Daily Count

	Engines	Aerials	Rescue Squads	EMS
Hours Required Per Year	297840	148920	61320	332880
Hours Provided FY10	297840	148906	61296	332880
Hours Provided FY11	297840	148920	61224	332880

Current Fleet

		Average Mileage	Average Engine Hours	Severe Duty Application of Engine Hours(1 hour =16 miles)
2007-2008	Engines Front Line	31993	3202	51232
1991-2008	Engines Reserve	91671	9420	150720
2003-2009	Aerial Towers	41623	4835	77360
1995-2008	Aerial Ladders	50125	4529	72464
1998-2000	Aerial Reserves	101666	7669	122704
2003-2008	Rescue Squads	30838	2594	41504
1997-2004	Rescue Squad Reserve	97108	4932	78912
2005-2010	EMS Unit Front Line	102409	Information not available across model years	
1999-2005	EMS Unit Reserve	179976	Information not available across model years	

Current Fleet Warranties

- 2007 EMS Units (17); no longer under warranty
- 2007 Aerials (7); Engine & Transmission warranties ending in CY2012, Aerial warranty CY2017
- 2008 Aerials (2); Engine & Transmission warranties ending in CY2013, Aerial warranty 2018
- 2008 Engines (37); Engine & Transmission warranties ending in CY2013, Pump warranty ending in CY2013
- 2008 Rescue Squads(3); Engine and Transmission warranties ending in CY2013
- 2009 Engines (4); Engine and Transmission warranties ending in CY2014 Pump warranty ending in CY2014
- 2010 EMS Units (18); 2 year bumper to bumper warranty ending in CY2012 Engine and Transmission warranties ending in CY2015

Challenges Each Day

- Meeting our daily count and system demands beyond the minimum count for training and volunteer participation
- Impact of the economy
  - Parts supply chain
  - Parts Cost
- Longer out of service time
- Changing technology
- Budget
  - Personnel, Vehicles, Facilities, Tools and Equipment, Fuel

Looking ahead

- Personnel
- Vehicle Acquisition
- Facilities
- Budget
- Information Technology
- Training
- Apparatus Maintenance and Repair
- Tools, Equipment and Appliances
- Consulting

Personnel

We need to build out the section to allow for staffing to support additional services and existing responsibilities:

- Technicians,
- Parts personnel,
- Support staff to shuttle vehicles;
- Staffing to support the portable tools and equipment;
- Fuel management;
- Administrative staff to focus on the customer service, warranty and record keeping needs.

Vehicle Acquisition

- Vehicle replacement funding needs to be consistent and level with increases planned for new technology
- Vehicle funding sources can include; CIP, Operating Budget, short term lease, and COPS Purchases

Facilities

The MCFRS Central Maintenance Facility is a leased facility. The facility has served MCFRS well but would serve MCFRS better with increased staff to support an additional shift.

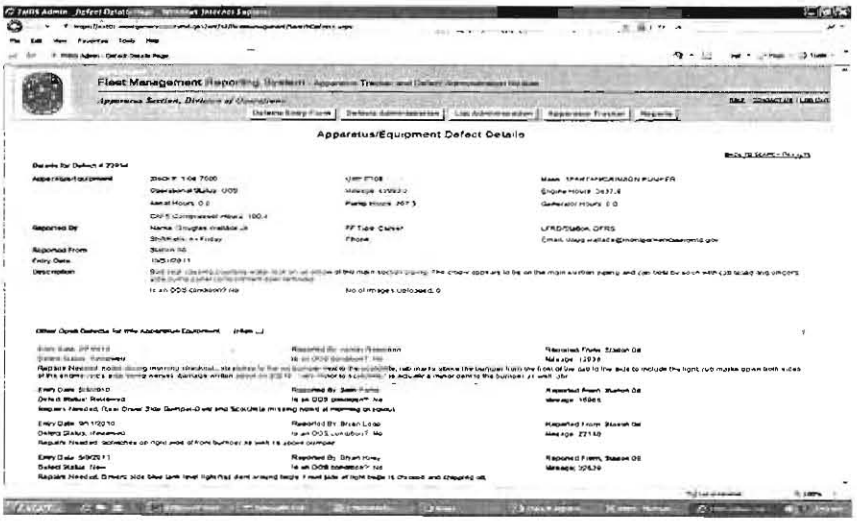
This facility as currently configured allows MCFRS to meet the needs of 60% of the preventative and routine maintenance on MCFRS medium and heavy duty units. With expansion into the remainder of the building and the appropriate infrastructure we could improve to 100% of those same needs.

Information Technology

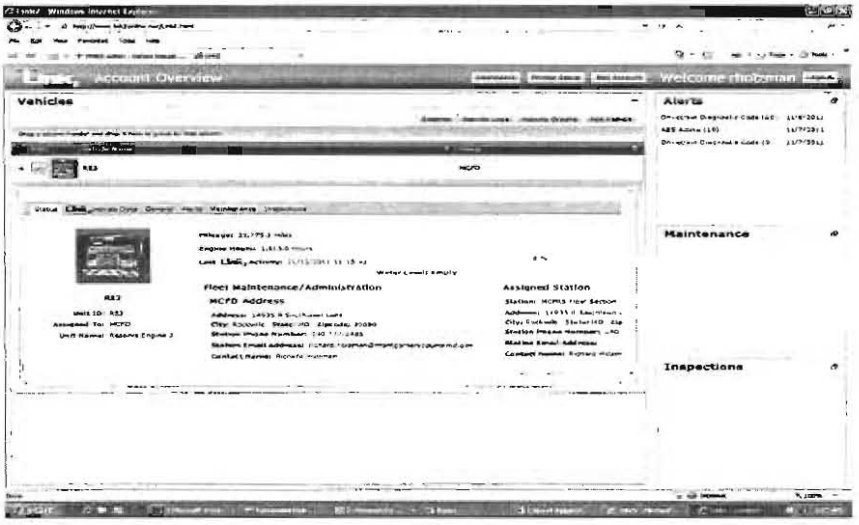
- Using FASTER as our Fleet Maintenance and Management Software.
- For defect reporting, we are using an online system developed DTS for this need
- Piloting on board vehicle data and information recording system on two engines.

FASTER

DEFECT REPORTING



ON BOARD VEHICLE MONITORING



Technician Training

- Investment in Training
- Return on Investment
- High Quality Rigs
- High Quality Personnel
- Initiated Minimum Training and Certification Standards for FD Technicians (ASE-EVT) that are Required in the Position Descriptions for FD Technicians

MCFRS Fleet Section Training FY10

- Hale Pump School
- Pierce TAK-4 Maintenance
- Pierce Aerial Training
- Hale CAFS Pro Operations And Maintenance Training
- On–Spot Installation And Service Training
- FASTER Training

MCFRS Training FY11

- Pierce All Wheel Steer Maintenance
- Pierce Command Zone
- Spartan End User Training
- County Required OHR Training
- FDSOA

© 2011 MCFRS

Spartan End User Training

© 2011 MCFRS

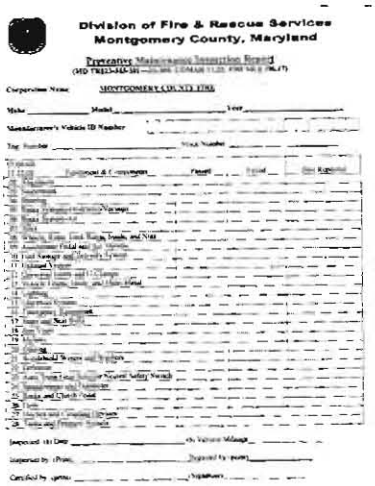
PM Schedule Based On Experience

- Goal
  - All Heavy Equipment (Engines, Aerials, Rescue Squads etc.)
    - Scheduled Service Semi-annually
      - A Chassis
      - B Chassis +Vocational (Pumps, Aerials, Generators

      On The Following Year
      - A Chassis
      - D Chassis/Vocational/Major Fluids
  - EMS Units 3-4 Times Per Year Based On Utilization

© 2011 MCFRS

Inspection Reports



Division of Fire & Rescue Services
Montgomery County, Maryland

Preventive Maintenance Inspection Report

© 2011 MCFRS

PM Task List Sample Aerial Page 1

MONTGOMERY COUNTY FIRE AND RESCUE
TOWS/TRUCK INSPECTION

Date _____ Stock / VIN _____
Mileage _____ Facility _____ Technician _____

© 2011 MCFRS

Why Do We Do This?